

Docket No.: 401.1013US
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Sugasawa, et al.

Application No.: 10/500,964

Confirmation No.: 3433

Filed: July 8, 2004

Art Unit: 1625

For: 2-Acylaminothiazole Derivative Or Salt Thereof

Examiner: Celia C. Chang

AMENDMENT AND RESPONSE TO OFFICE ACTION

MS: AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

September 21, 2009

Dear Sir:

In response to the Final Office action mailed on June 30, 2009 please amend the above-identified patent application as follows.

Amendments to the Claims begin on page 2 of this paper.

Remarks begin on page 6 of this paper.

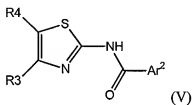
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AMENDMENT TO THE CLAIMS

This listing of claims will replace all prior versions of the claims.

Claims 1-36. (Cancelled)

¹
Claim 37. (Previously Presented) A 2-acylaminothiazole derivative compound represented by the following Formula (V), or a pharmaceutically acceptable salt thereof:

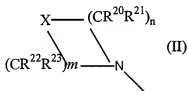


wherein the symbols have the following meanings:

Ar²: substituted or unsubstituted phenyl or monocyclic aromatic heterocycle;

R³: a substituted or unsubstituted thienyl;

R⁴: a group represented by Formula II:



wherein X is C(R²⁷)R²⁸ or NR²⁶ and m=n=2;

wherein CR²⁰R²¹ and CR²²R²³ can be identical or different; and

wherein each of R²⁰, R²¹, R²², R²³, R²⁶, R²⁷, and R²⁸ can be the same or different and can be selected from the group consisting of -H; -OH; -O-lower alkyl; a substituted or unsubstituted lower alkyl; a substituted or unsubstituted cycloalkyl; a substituted or unsubstituted aryl; a substituted or unsubstituted arylalkyl; a substituted or unsubstituted aromatic heterocycle; a substituted or unsubstituted aromatic heterocyclic alkyl; a substituted or unsubstituted nonaromatic heterocycle; lower alkenyl; lower alkylidene; -COOH; -COO-lower alkyl; -COO-lower alkenyl; -COO-lower alkylene-aryl; -COO-lower alkylene-aromatic heterocycle; carbamoyl or amino, each of which can be substituted with one or more groups selected from the group consisting of lower alkyl

which can be substituted with halogen, -OH, -O-lower alkyl, or -O-aryl; -NHCO-lower alkyl; and oxo.

²
Claim ~~38~~. (Previously Presented) The compound according to claim ~~37~~¹, wherein Ar² is phenyl or pyridyl, each of which can be substituted.

³
Claim ~~39~~. (Previously Presented) The compound according to claim ~~37~~¹, wherein R³ is a thienyl which is substituted with 1 to 3 halogen atoms, which can be identical or different.

⁴
Claim ~~40~~. (Currently Amended) The compound according to claim ~~39~~³[[37]], wherein R⁴ is 4-(piperidin-1-yl)piperidin-1-yl, 4-propylpiperidin-1-yl, 4-cyclohexylpiperazin-1-yl, or 4-propylpiperazin-1-yl.

⁵
Claim ~~41~~. (Currently Amended) The compound according to claim ~~40~~⁴[[37]], wherein Ar² is phenyl which is unsubstituted at 2- and 6-positions, substituted with -H, -F, -Cl, or -Br at 3-position, substituted with -F, -Cl, or -Br at 5-position, and substituted at 4-position; or pyridin-3-yl which is unsubstituted at 2- and 4-positions, substituted with -F, -Cl, or -Br at 5-position, and substituted at 6-position.

⁶
Claim ~~42~~. (Currently Amended) The compound according to claim ~~41~~⁵[[37]], wherein Ar² is phenyl which is substituted at 4-position with a group selected from the group consisting of -O-R^Y, -NH-R^Y, a substituted or unsubstituted piperidin-1-yl and a substituted or unsubstituted piperazin-1-yl; or pyridin-3-yl which is substituted at 6-position with a group selected from the group consisting of -O-R^Y, -NH-R^Y, a substituted or unsubstituted piperidin-1-yl and a substituted or unsubstituted piperazin-1-yl, wherein R^Y is lower alkyl which can be substituted with one or more groups selected from the group consisting of -OH, -O-lower alkyl, amino which can be substituted with one or two lower alkyl, -CO₂H, -CO-lower alkyl, carbamoyl which can be substituted with one or two lower alkyl, cyano, aryl, aromatic heterocycle, nonaromatic heterocycle and halogen.

⁷
Claim ~~43~~.¹⁻⁶ (Currently Amended) The compound according to any one of claims ~~[[5, 25 and]]~~ ~~37-42~~ wherein the pharmaceutically acceptable salt is a maleate salt.

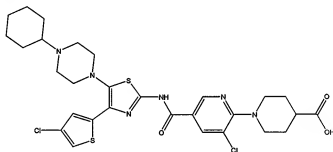
¹⁰
Claim ~~44~~.¹⁻⁶ (Currently Amended) A pharmaceutical composition comprising a therapeutically effective amount of any one of the pharmaceutical compounds of claims ~~37-42~~ ^{5, 7, 9-13 and 18-42} and a pharmaceutically acceptable carrier.

¹¹
Claim ~~45~~.⁷ (Previously Presented) A pharmaceutical composition comprising a therapeutically effective amount of a compound of claim ~~43~~ and a pharmaceutically acceptable carrier.

¹²
Claim ~~46~~.¹⁰ (Previously Presented) The pharmaceutical composition according to claim ~~44~~, wherein the pharmaceutical composition is formulated for oral administration.

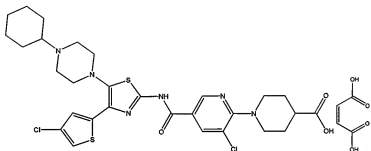
¹³
Claim ~~47~~.¹¹ (Previously Presented) The pharmaceutical composition according to claim ~~45~~, wherein the pharmaceutical composition is formulated for oral administration.

¹⁴
Claim ~~48~~. (New) A pharmaceutical composition for treating thrombocytopenia, the composition comprising: a therapeutically effective amount of a compound selected from the group consisting of



and pharmaceutically acceptable salts thereof; and
a pharmaceutically acceptable carrier.

¹⁵
 Claim ~~49~~. (New) The pharmaceutical composition of claim ~~48~~, wherein the
 compound is:



⁸
 Claim ~~50~~. (New) A compound selected from the group consisting of: 1-(3-chloro-5-
 {[4-(4-chlorothiophen-2-yl)-5-(4-cyclohexylpiperazin-1-yl)thiazol-2-yl]carbonyl}-2-
 pyridyl)piperidine-4-carboxylic acid, and pharmaceutically acceptable salts thereof.

⁹
 Claim ~~51~~. (New) The compound of claim ~~51~~, wherein the pharmaceutically
 acceptable salt is the maleic acid salt.